

often surprising how much actual relief of suffering and prolongation of life this latter procedure, even in the most desperate cases, can produce. There are authentic cases that have survived eleven or twelve years with complete control of urination and without pain or other distressing symptoms.

But, in spite of radium and deep x-ray, the treatment of prostatic cancer is most unsatisfactory, and it is for this very reason that effort should be made to make as early diagnosis as possible in order to increase the percentage of cases in which a radical complete removal can be performed. The occasional surprising benefit, prolongation of life and marked relief that follows the conservative perineal operation with implantation of radium justifies its more general application even in the face of the many failures. These failures do not leave the patient in a more distressing and unfortunate condition than does a suprapubic drain.

In the discussion above referred to, Chute takes the point of view of surgical treatment when possible and his colleague, John L. Cunningham, advocates the opposite course of treatment. In a recent very complete analysis of the carcinoma cases at the Mayo Clinic, Bumpus also came out definitely in support of the hopelessness of these cases, advocating that in the majority a simple cystotomy drainage gave them as much relief as any procedure.

But this brings us back to the point above presented, namely that those who advocate simple suprapubic drainage are the ones who perform suprapubic prostatectomy, whereas those who believe they can give more relief to these unfortunates by perineal surgery and cure a certain number, which will increase with earlier diagnosis, are the ones who are performing perineal prostatectomy. Perineal surgery for carcinoma is more difficult than for benign hyperplasia. Those who have no success with this route in benign cases and therefore elect the suprapubic route cannot expect their results in the more difficult condition of cancer to be any better. Suprapubically the attack on cancer is helpless except to remove an associated obstructing enlargement or give bladder drainage.

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REFERENCE

1. Arthur L. Chute: Bost. M. & S. J., 197: 1207-1213, 1927.

Syphilology

Viability of *Spirochaeta Pallida*.—Some surprises have been revealed by studies on the viability of *Spirochaeta pallida* outside the body. It is commonly supposed that when an exudate or other matter containing spirochetes gets cold it is no longer infectious—consequently the possibility of infection from toilets, douche-tips, and so on, is not generally conceded.

Motility is not a reliable criterion of life, for biological methods have shown spirochetes to be

still virulent after motility has ceased. However, motility has been observed to persist in cover-glass preparations fifty days (Beer), four weeks (Arning and Klein), twelve days (Mierowsky), four days (Hartmann), two days (Mucha and Landsteiner), 24-48 hours (E. Hoffmann), and 5-6 hours (Eitner). Zinsser and Hopkins kept *Spirochaeta pallida* alive for 11½ hours in a moist towel at room temperature in daylight. Reasoner mixed serum expressed from testes of syphilitic rabbits with distilled water and tap water and noted motility after four hours. Rubin and Szentzkysaly noted motility in a hanging drop for five days. Spirochetes have been observed in capillary tubes and reported still motile after several weeks by numerous authors. Reasoner observed motile spirochetes after 56 hours in testes excised from syphilitic rabbits; Haythorn and Lacy put similar testes in an ice-box and found spirochetes contained therein to regain motility at the end of 5-8 days. They successfully inoculated a rabbit with material taken from a syphilitic stillbirth 26 hours after delivery; M. Koch succeeded in a similar experiment with material from a congenital-syphilitic child three days after death. Truffi reported motile spirochetes taken from the primary lesion of a corpse 52 hours after death. Werther repeatedly demonstrated living spirochetes in livers of syphilitic fetuses which had been kept in an ice-box for eleven days. The danger of infections from necropsies during the first twenty-four hours is very great. E. Hoffmann has found twenty such infections reported in the literature and one is known to me. Several of these have been unusually malignant. Inoculation experiments have been successful with chancres extirpated 96 hours from rabbits (Zurhelle and Stempel). At ice-box temperature the life of *Spirochaeta pallida* is prolonged for months. Krantz exposed spirochetes at -20° C. for one hour and saw them regain motility after two days. Kissmeyer obtained successful subcultures from cultures which had been kept at -16° for three months. Oelze sprayed cover-glass preparations and capillary tubes containing *Spirochaeta pallida* with ethylchlorid till frosted, then noted resumption of motility on thawing. Arnheim reported survival of spirochetes held at 60° C. for five minutes, Zethnow confirmed this but reported they were killed at 60° C. for 20 minutes, but not at 50° C. for 20 minutes.

In the light of these observations one must acknowledge that accidental infections from douche-tips, toilet seats, towels, and so on, are not beyond the realm of possibility.

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Immunology

Rate of Development of Pneumococcus Immunity.—Inasmuch as pneumonia is a self-limiting disease usually ending by crisis or lysis between the seventh and tenth days, three to five days are frequently afforded in which an at-

tempt may be made to produce active immunity. Barach¹ of the department of medicine of Columbia University, New York City, has recently reported experimental evidence that an effective immunization is possible within this short period of time.

Barach injected mice intraperitoneally with special vaccines prepared from early, highly virulent cultures of pneumococci, and found the onset of definite immunity on the third day after the injection. In some mice the immunity was sufficient by the third day to protect against 10,000 to 100,000 M. L. D. of the infectious agent. The immunity increased markedly to the fifth day and remained approximately stationary till the seventh day. Barach found that this early antipneumococcus immunity is specific for the pneumococcus type used. Whether or not patients with lobar pneumonia will react in the same way was not determined by him.

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1. Barach, A. L.: *Proc. Soc. Exper. Biol. and Med.*, 1928, 25, 558.

Dermatology

Orbicular Eczema.—Regional types of various dermatoses are often, and justly so, considered as separate clinical problems because of the special clinical factors peculiar to each anatomic locality.

Orbicular eczema is chosen here as a subject of clinical discussion because of its comparative frequency and its alleged intractability.

Not uncommonly patients with orbicular eczema consult the ophthalmologist first, being under the impression that their condition might be caused by some ocular abnormality. In fact, some of these eczemas do develop while the patient is under the ophthalmologist's care for some ocular disorder.

Orbicular eczemas may involve one or both of the eyelids or supra- and infra-orbicular regions. Morphologically they may be very acute with a good deal of inflammatory edema and exudation or very chronic with dry, scaly infiltrated patches.

The condition is very often associated with a distressing itching and discomfort.

The common reason for therapeutic failure in such cases is that they are routinely treated as if all were of the same type.

There are at least four different types of orbicular eczemas, each of which requires individual treatment and handling.

The type of the greatest interest to ophthalmologists is the eczema developing secondarily to some ocular disturbance, associated with profuse conjunctival discharge. These eczemas are usually

of a weepy exudative character and are often associated with edema and great irritability of the skin. Not uncommonly they are caused or aggravated by an idiosyncrasy of the skin to ophthalmologic remedies such as dionin, silver nitrate, etc.

These cases require above all protective and soothing applications such as Burrow's solution and soothing creams.

In some cases eczema is an extension of blepharitis and is merely an expression of the general exudative diathesis and scrofula. In these cases systemic tonic treatment is the main therapeutic consideration.

Both of these varieties are often associated with pyogenic infection, which fact is readily disclosed by the development of well-defined circinate borders, bulky heavy crusts, and a tendency to rapid extension. These cases are benefited by mild antiseptic ointments and lotions such as 1 to 2 per cent of mercury ammoniate and lotio nigra.

Still another type of orbicular eczema is the seborrheic. This type is characterized by a selective localization of the lesions on the eyebrows, with a tendency to descend and invade the nasolabial folds. The lesions themselves are characterized by heavy yellowish crusts and only mild itching. These cases respond well to mild antiseptic ointments containing salicylic acid, resorcin and sulphur. Dietetic restriction of fat, carbohydrates and sugars is essential.

The most resistant and possibly the most important clinically is the type represented by dry, infiltrated, extremely itchy patches which may be located in any part of the orbicular region. These cases are as a rule of systemic, dietetic or metabolic origin, and call for careful study and regulation of the diet.

Therapeutically it is important to remember that, due to a peculiar tender texture of the skin in the orbicular region, irritating and strong local applications are decidedly contraindicated.

It is also of practical interest to know that, due to the close proximity of the eyes, various modalities of the ultra-violet light, so beneficial in superficial forms of eczemas, are not suitable for therapeutic purposes in orbicular eczemas.

Our main resource in these cases is x-ray radiation which, if used judiciously in small fractional doses such as one-sixth or one-eighth of a skin unit with a spark gap of 4 to 5 inches, is perfectly safe and admirably effective. The most serviceable ointment is the one containing anesthesin 2 to 4 per cent and naphthalan (Steinwe) 4 to 10 per cent in lanolin or plain Lassar paste.

In conclusion I wish to emphasize the utmost importance of individualization of treatment of the various types of orbicular eczemas and the correct interpretation of the skin lesions.

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